

Quantitative Usage Analysis for propargite
Case Number: 243 PC Code: 97601
Analyst: Jihad Alsadek Date: Revisited June 8, 2000

Based on available pesticide survey usage information for the years 1988 through 1998, an annual estimate of propargite's total domestic usage averaged almost two million pounds active ingredient (a.i.) for over a million acres treated. Most of the acreage is treated with two and a half pounds a.i. or less per application and two pounds and a half a.i. per year. Propargite is an insecticide with its largest markets in terms of average total pounds active ingredient allocated to corn, cotton, grapes, almonds, mint, and walnuts. The remaining usage is primarily on apples, peaches, alfalfa, dry beans, potatoes, tangelos, nectarines, and peanuts. Tolerances for apples, apricots, succulent beans, cranberries, dried figs, fresh figs, peaches, pears, plums (fresh prunes), and strawberries have been revoked. Only six of them (plums and prunes, strawberries, apples, apricots, peaches, and pears, highlighted at the end of the usage profile) still show propargite use and the rest show very little or no use at all, and that is why they are not listed (fresh and dried figs, cranberries, and succulent beans). The 1991 USDA/NASS publication shows that 27 percent of bearing apples are treated with propargite, while 14 percent of the nonbearing apples are propargite treated. Most of the usage is in FL, CA, MI, ID, WA, TX, AND MN. Changes to the May 25, 2000 QUA are italicized. These changes might change the risk measure for this chemical.

Site	Acres (000)	Acres Ttd (000)		% Crop Ttd		Lb AI (000)		Ave. Appl Rates			States of Most Usage (% of total lb ai used on this site)
	Grown	Weighted Average	Est Max	Weighted Average	Est Max	Weighted Average	Est Max	lb ai/ acre/yr	# appl /year	lb ai/A /appl	
Grapefruit	350	3.1	6.2	0.9%	1.8%	7.8	15.6	2.5	1.1	2.3	FL 100%
Lemons	62	0.1	0.9	0.2%	1.4%	0.3	1.6	2.4	1.0	2.4	CA 100%
Oranges	1,750	12.0	24.0	0.7%	1.4%	43.4	153.0	3.6	1.4	2.6	FL 95%
Tangelos	20	0.2	1.0	0.9%	5.0%	0.4	2.5	2.5	1.0	2.5	FL 100%
Cherries, Sweet	47	2.6	6.0	5.5%	12.9%	6.5	6.9	2.5	1.0	2.5	CA 100%
Cherries, Tart	49	0.2	1.0	0.4%	2.1%	0.5	2.8	2.8	1.0	2.8	MI 100%
Nectarines	27	6.0	12.0	22.2%	44.4%	20.0	40.0	3.3	1.0	3.3	CA 100%
Stone-Like Fruit, Other	188	15.5	43.7	8.2%	23.2%	33.7	104.1	2.2	1.1	1.9	CA 85%
Grapes [1]	829	180.0	249.4	21.7%	30.1%	350.0	487.5	1.9	1.3	1.6	CA 100%
Almonds	435	150.0	256.5	34.5%	58.9%	320.0	542.0	2.1	1.2	1.8	CA 99%
Walnuts	204	51.6	94.5	25.3%	46.3%	120.0	180.4	2.3	1.2	2.0	CA 100%
Carrots	104	0.6	2.0	0.6%	1.9%	0.2	0.4	0.4	1.0	0.4	CA 100%
Potatoes	1,433	29.6	84.2	2.1%	5.9%	43.0	126.2	1.5	1.0	1.5	WA 85%
Sweet Corn	731	3.7	7.3	0.5%	1.0%	10.0	20.1	2.7	1.4	2.0	CA WA 83%
Beans, Dry	1,809	87.4	180.0	2.0%	4.0%	50.4	111.4	0.6	1.0	0.6	CA ID WA 100%
Sorghum	11,115	22.0	44.0	0.2%	0.4%	2.8	5.5	0.1	1.0	0.1	TX 99%
Corn	73,357	280.0	504.0	0.4%	0.7%	460.0	891.5	1.6	1.0	1.6	CA NE CO KS 86%
Alfalfa	23,701	28.9	73.6	0.1%	0.3%	54.9	139.4	1.9	1.2	1.6	NV CA WA ID 83%
Peanuts	1,581	11.4	46.0	0.7%	2.9%	22.5	87.9	2.0	1.0	1.9	AL GA NC FL VA 91%

Cotton	12,859	210.0	372.0	1.6%	2.9%	360.0	706.1	1.7	1.2	1.5	CA AZ TN 94%
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Site	Acres (000)	Acres Ttd (000)		% Crop Ttd		Lb AI (000)		Ave. Appl Rates			States of Most Usage (% of total lb ai used on this site)
	Grown	Weighted Average	Est Max	Weighted Average	Est Max	Weighted Average	Est Max	lb ai/ acre/yr	# appl /year	lb ai/A /appl	
Hops	42	23.2	32.0	5.0%	8.0%	33.8	46.7	1.5	1.0	1.5	WA OR 93%
Sugar Beets	1,425	1.8	3.0	0.1%	0.2%	5.0	10.0	2.8	1.0	2.8	CA TX 81%
Tangerines	24	0.2	1.0	0.8%	4.3%	0.5	2.4	2.4	1.0	2.4	FL 100%
Mint*	170	-	-	22.0%	34.0%	-	-	-	-	-	-
Ornamental*	-	-	-	-	-	140.0	145.0	-	-	-	-
Boysenberries*	2	-	-	-	-	-	-	-	-	-	-
Raspberries*	17	-	-	-	-	-	-	-	-	-	-
Currants*	1	-	-	-	-	-	-	-	-	-	-
Limes*	4	-	-	-	-	-	-	-	-	-	-
Filberts*	33	-	-	-	-	-	-	-	-	-	-
Macadamia and Pistachio Nuts*	116	-	-	-	-	-	-	-	-	-	-
Quinces*	-	-	-	-	-	-	-	-	-	-	-
Dates*	7	-	-	-	-	-	-	-	-	-	-
Persimmons*	4	-	-	-	-	-	-	-	-	-	-
Clover*	-	-	-	-	-	-	-	-	-	-	-
Plantations (Chris. trees)*	136	-	-	-	-	-	-	-	-	-	-
Pine Plantations*	36	-	-	-	-	-	-	-	-	-	-
Fir(Grand, Douglas, & Noble)*	-	-	-	-	-	-	-	-	-	-	-
Scotch Pine*	-	-	-	-	-	-	-	-	-	-	-
Carnation*	-	-	-	-	-	-	-	-	-	-	-
Chrysanthemum*	-	-	-	-	-	-	-	-	-	-	-
Rose*	-	-	-	-	-	-	-	-	-	-	-
Jojoba*	6	-	-	-	-	-	-	-	-	-	-
Blue spruce*	-	-	-	-	-	-	-	-	-	-	-

Even though there are no food-use for these crops on the label, still some propargite use occurs

Pecans	492	0.5	1.1	0.1%	0.2%	0.6	1.1	1.0	1.1	1.0	GA CA 95%
Soybeans	62,974	126.0	252.0	0.2%	0.4%	10.1	20.3	0.1	1.0	0.1	MN 99%
Avocados	82	2.9	6.0	3.5%	7.3%	6.0	12.0	2.1	1.0	2.1	CA 100%

Tolerances for these crops have been revoked but some usage still occurs on the nonbearing acreage

Plums & Prunes	47	3.6	7.2	7.7%	15.3%	6.0	12.0	1.7	1.1	1.5	CA 91%
Strawberries	16	2.5	5.0	15.6%	31.3%	4.0	8.0	1.6	1.0	1.6	CA OR 84%
Apples	170	18.0	36.0	10.6%	21.2%	32.0	64.0	1.8	2.2	0.8	NY WA MI MA CA ME 64%
Apricots	6	0.1	0.2	1.2%	6.0%	0.2	1.0	2.9	1.0	2.9	CA 100%
Peaches	87	10.0	20.0	11.5%	23.0%	21.0	42.0	2.1	1.3	1.6	CA 81%
Pears	25	0.1	0.2	0.2%	1.3%	0.1	0.2	1.3	1.4	1.0	NY WA MA CA MI 87%
Total		1120	2043			1945	3681				

COLUMN HEADINGS

Weighted average--the most recent years and more reliable data are weighted more heavily.

Est Max = Estimated maximum, which is estimated from available data.

Average application rates are calculated from the weighted averages.

NOTES ON TABLE DATA

Usage data primarily covers 1988 - 1998.

*: These are registered sites but have little or no propargite usage.

Tea is imported from China, Indonesia, Japan, and the rest is imported from Taiwan and Vietnam. 2.14 percent of tea imported from these countries to the USA are treated with propargite. This value is the product of percent of tea treated in each of these countries multiplied by the percent of US import share for each country

[1]: EPA internal data show 41% of grapes are treated with propargite for raisin, 12% for table grapes, and 7% for wine. 17 percent of grape juice from California is ready for consumption is treated with propargite, 33 percent is imported, and the rest of grape juice comes from the rest of the States. This shows that grape juice has been treated with propargite. NASS data show that 20 percent of grapes in California are treated. For risk measurement, use 21.7 percent.

Other/Crop Groups

Stone-Like Fruit, Other includes apricots, avocados, dates, nectarines, olives, coconuts, mangoes, and feijoa.

SOURCES: EPA data (1988-98), USDA/NASS (1990-97), National Center for Food and Agricultural Policy (1992), CA (1993-95), and Maritz (1996, partial).